

Abstract

Disclosed is a protein variant which substitutes valine for phenylalanine residue in a binding domain having a biological response-modifying function by binding to a receptor, ligand or substrate. Also, the present invention discloses a DNA encoding the protein variant, a recombinant expression  
5 vector to which the DNA is operably linked, a host cell transformed or transfected with the recombinant expression vector, and a method of preparing the protein variant comprising cultivating the host cell and isolating the protein variant from the resulting culture. Further, the present invention discloses a pharmaceutical composition comprising the protein variant and a pharmaceutically acceptable carrier.